

Product datasheet for **AP51328PU-N**

CDT2 (DTL) (Center) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, WB
Recommended Dilution:	ELISA: 1/1000. Western Blot: 1/100-1/500. Flow Cytometry: 1/10-1/50.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide between 229-256 amino acids from the Central region of Human DTL.
Specificity:	This antibody recognizes Human and Mouse CDT2 / DTL (Center).
Formulation:	PBS with 0.09% (W/V) Sodium Azide as preservative State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	denticleless E3 ubiquitin protein ligase homolog
Database Link:	Entrez Gene 76843 Mouse Entrez Gene 51514 Human Q9NZJ0



[View online »](#)

Background:

Substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex required for cell cycle control, DNA damage response and translesion DNA synthesis. The DCX(DTL) complex, also named CRL4(CDT2) complex, mediates the polyubiquitination and subsequent degradation of CDT1 and CDKN1A/p21(CIP1). CDT1 degradation in response to DNA damage is necessary to ensure proper cell cycle regulation of DNA replication. CDKN1A/p21(CIP1) degradation during S phase or following UV irradiation is essential to control replication licensing. Most substrates require their interaction with PCNA for their polyubiquitination: substrates interact with PCNA via their PIP-box, and those containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to their degradation. In undamaged proliferating cells, the DCX(DTL) complex also promotes the 'Lys-164' monoubiquitination of PCNA, thereby being involved in PCNA-dependent translesion DNA synthesis.

Synonyms:

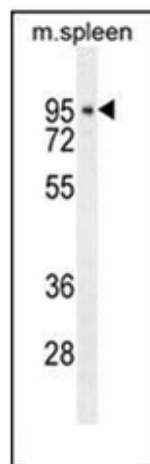
Denticleless protein homolog, CDW1, DCAF2, L2DTL, RAMP

Note:

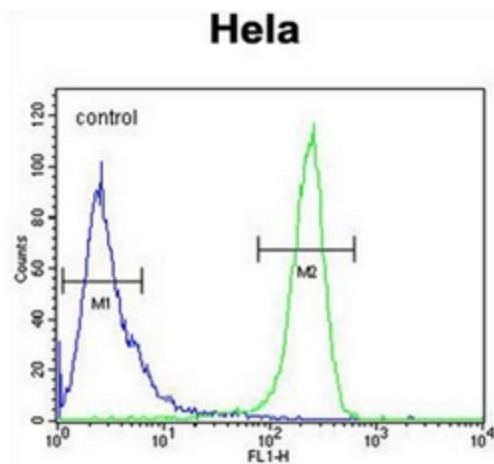
Molecular Weight: 79468 Da

Protein Families:

Druggable Genome

Product images:

Western blot analysis of CDT2 / DTL Antibody in mouse spleen tissue lysates (35ug/lane). This demonstrates the DTL antibody detected the DTL protein (arrow).



Flow cytometric analysis of HeLa cells using CDT2 / DTL Antibody (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.